

# Anti-COVID-19 vaccine movements and the mental unity of the masses

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**ABSTRACT**

It is useful to view the anti-vaccine movements in the light of current social psychology, psychoanalysis, and biomedical insights. The study of the formation, types, motivations and other characteristics of the psychological masses can guide us in the creation of effective vaccination strategies, important in the context of COVID-19. A search was carried out with the key terms "hesitancy", "refusal", "vaccination", "anti-vaccination", "movement", "social", "psychology", "COVID-19" between the years 2019 and 2022. The Scopus, Google Scholar, Taylor & Francis, Mendeley and PubMed Central databases were consulted. Three hundred and sixty-one documents were retrieved and after filtering, as shown in figure 2, Thirty-three were chosen for the construction of the document. This selected literature was correlated as much as possible with the landmark works of Le Bon and Freud on crowd psychology. The most relevant thing that is analyzed here is the very probable validity today of the ideas of the French doctor and psychologist and the Viennese psychoanalyst in the understanding of the anti-vaccine masses. Helpful ideas from these two authors are also found that serve to complement and improve strategies currently used to promote immunization, and some suggestions for these strategies are given at the end. Credible and influential authorities, government entities, legislation, and health providers must dispel misinformation. They must be supported by experts in marketing, graphic design, etc. so that the contents of pro-vaccination propaganda have a greater impact on people than the media used by the anti-vaccine masses. As expert professionals we must improve strategies to improve the acceptance of vaccination.



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## 1. INTRODUCTION

Denialism towards vaccination is present from its very existence. Even the pre-vaccination practice, called variolation, came under intense criticism. Anti-vaccine movements, such as the one in Leicester, were created, and between 1870 and 1890 pamphlets, texts, magazines and other types of material circulated to spread these ideas. These anti-vaccination movements also appeared in Europe and North America in the nineteenth century. Some succeeded in overturning mandatory vaccination laws in the US Public health authorities and anti-vaccine movements have been in constant conflict, fighting for or against vaccination even before the

law [1].

According to Hagood and Mintzer, the subjects involved in anti-vaccine movements can be classified into three types: those who reject them, those who are resistant to them and those who are undecided [2].

The pathology due to coronavirus (COVID-19), which began in Wuhan, China, had its first reported case in the last month of 2019 and continues with us to this day [3].

Like a universal pandemic disease. COVID-19 is an ideal terrain for the spread of false narratives. A distinctive feature of these discourses is the proliferation of conspiracy theories in the media, how, for example, the QAnon theory (American political conspiracy theory and political movement) that would spread how the coronavirus was a hoax. Recently, adherents to this theory persist in undermining confidence in the anti-COVID-19 vaccine. Data has been spread about QAnon, as well as about other myths and conspiracies about the coronavirus, ranging from Bill Gates as the creator of this microorganism, to an infinity of fanciful causes and bizarre treatments that have undoubtedly caused damage to the population [4].

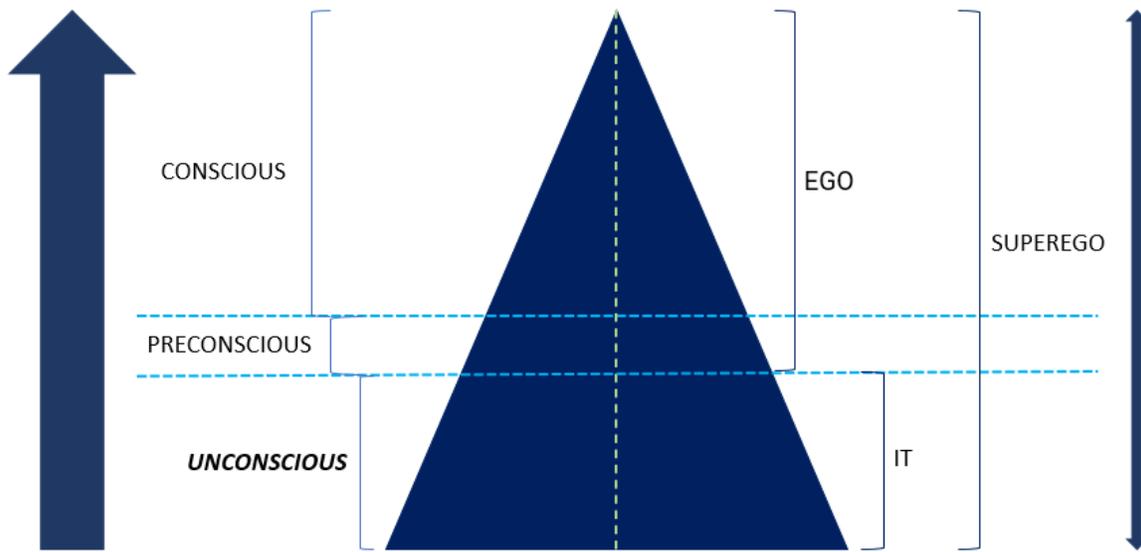
Misinformation about public health can enhance the population's refusal to receive anti-COVID-19 vaccines, which the WHO lists today among the ten most serious threats at the health level. Conspiracy narratives are then a combination of disinformation, misinformation and the generation of simple or organized psychological masses, whose characteristics are shown in Table 1, and which are especially effective for people to believe in statements after the fact and thus, these harmful social movements are formed [5].

**Table 1.** Conditions to consider a mass as organized. Prepared by the author based on Mc. Dougall, mentioned by S. Freud [6].

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|--|
| <b>First condition</b>   |
| Some degree of continuity in the conformation of the dough. Continuity can be material or formal; the first, when the same people are part of the crowd, for a prolonged period; the second, when situations or hierarchies are generated among the masses that are successively occupied by different people. |
| <b>Second condition</b>  |
| It is necessary that every one of the mass has formed a certain idea of the nature, the functions, the actions and the pretensions of this idea, from which an emotional attitude towards the whole mass is produced for him.  |
| <b>Third condition</b>   |
| It is necessary for the mass to relate to other similar but different collectivities in various aspects and even to antagonize it.   |
| <b>Fourth condition</b>  |
| The mass has its own traditions, utility, and institutions, concerning, mainly, the bidirectional connections of its members.  |
| <b>Fifth condition</b>   |

The crowd has an organization that manifests itself in the specialization and differentiation of the activities of each of its members.

To further reinforce the concern that should be had about this issue, recent systematic reviews have reported percentages of acceptance of the vaccine of just between 29.4% and 86%. For example, the Middle East reported a rate of 29.4%, while Kuwait reported a rate of 53.1%. It was found that 86% of people in the UK expressed a desire to access the vaccine. These data are worrying, since it is considered that in order to achieve *herd immunity*, at least 70-75% of the population must be immunized [6]. The important applicability of the ideas and concepts of Gustave Le Bon and Sigmund Freud to many of our questions about the thought of the masses, made several years ago, has not been in vain and of course, there are several of them that are valid in the present [7]. As early as 1895, Le Bon gave cardinal importance to the *unconscious* and its application in this subject, later Freud takes it as the central axis of psychoanalytic theory as shown in figure 1, attributing to it the main role as generator of our external behavior, individual and collective [7]. [8].



**Figure 1.** Structure of the psychic apparatus according to Freudian theory. Importance of the unconscious as a generator of individual and mass behavior. Prepared by the author based on the work of S. Freud

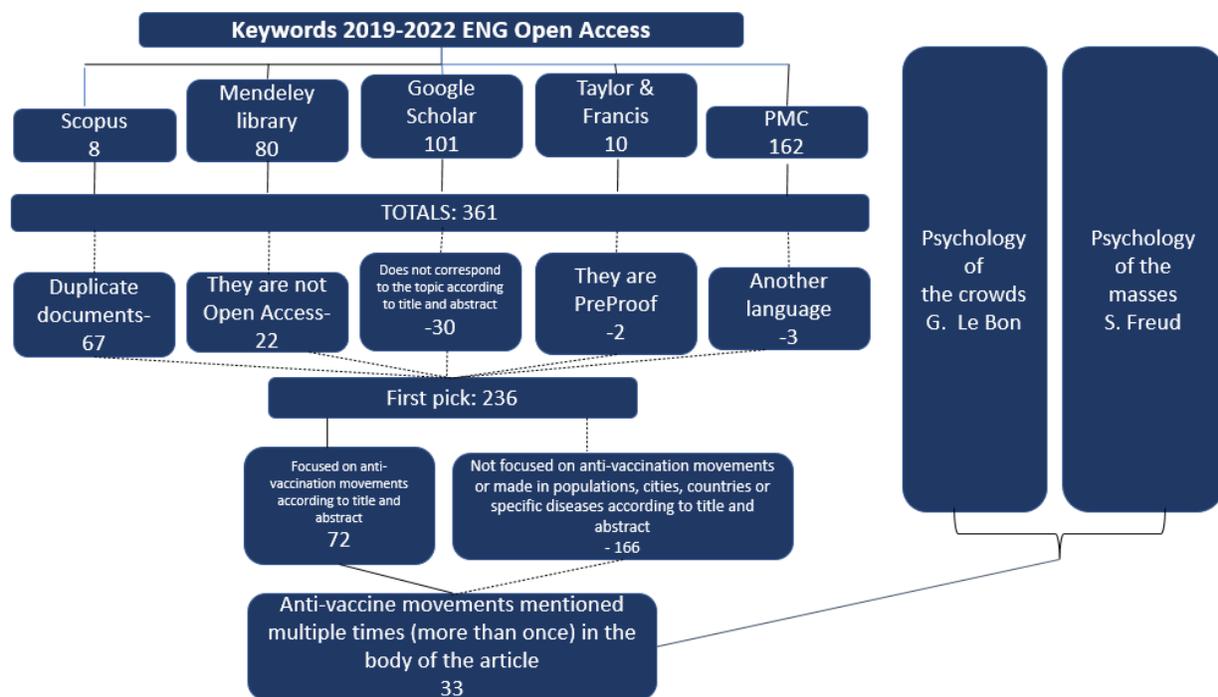
S. Freud notes that only rarely and under certain exceptional conditions, is it given to the subject to deprive himself of interaction with his close beings. In personal psychic life, "the other" is constantly included as a model, object, collaborator or opponent. In this way, personal psychology is simultaneously and from the beginning, social psychology [8].

In this review, the refusal to vaccination is conceptualized as an attitude of *medical noncompliance*, and some of the conditions that favor it are evaluated. This process is born, among other reasons, of avoidance mechanisms and functional alteration of behavior, governed by rules, by the framework of present relationships and resistance to control [3]. The objective of this paper is to analyze some aspects of two fundamental works, one on social psychology (Gustave Le Bon's *Psychology of Crowds*) and another on psychoanalysis (Sigmund Freud's *Psychology of the Masses*) and compare them with current literature about anti-vaccine movements. The above as an attempt to understand this phenomenon and if it is possible to suggest intervention strategies for the community, given this way of thinking. The note is made that, although

the two bodies of knowledge (Le Bon and Freud vs. current knowledge) are from different times and with different scientific methodologies, this does not necessarily invalidate the concepts expressed in previous centuries.

## 2. Methodology

A search was carried out with the key term's "hesitancy", "refusal", "vaccination", "anti-vaccination", "movement", "social", "psychology", "COVID-19" between the years 2019 and 2022, that they were Open Access and in English. Scopus, Google Scholar, Taylor & Francis, Mendeley and PubMed Central databases were consulted. Three hundred and sixty-one articles were retrieved, duplicates were eliminated, those that were not Open Access, those that did not correspond to the topic taking into account title and abstract, the Pre-Proof, and those that were in different languages. Two hundred and thirty-six documents were obtained in this first selection. Subsequently, those that were not focused on the specific topic of anti-vaccination movements or that were made in populations, cities, countries, or people with specific diseases, also according to title and abstract, were excluded, thus leaving 72 articles. Finally, those that mentioned the topic of anti-vaccine movements in the body of the article more than once were selected, leaving 33 documents at the end of the filtering, which were used for the construction of the article, correlating them, when possible, with the aforementioned works by Le Bon and Freud on crowd psychology, as shown in figure 2.



**Figure 2.** Selection of the literature. Prepared by the author.

## 3. Discussion

*psychological mass* is defined as an agglomeration of people who, under certain conditions, have new characteristics, different from those of their individuals when they are isolated [8]. The aim of the universal anti-COVID-19 vaccination according to the WHO guidelines is to achieve group immunity; however, the anti-vaccination movements, as agglomerations that they are, develop fierce campaigns against vaccines, for different reasons, and wrong notions of the subject [9].

To begin with, the idea expressed by Le Bon is exposed that, without a doubt, the masses are unconscious, and this unconsciousness is one of the keys to their strength [7]. Additionally, Freud expresses that the masses

have expressions of an irreducible drive of the social instinct, which does not usually arise in individual action [8]. According to these theorists, the activity of the masses once formed is promoted without the exercise of consciousness and therefore of reason, so we must question whether the pro-vaccination intervention models with markedly reactive ideas and simple methodologies to strengthen the vaccination acceptance; how increasing the frequency of communications in favor of this by doctors and by governments is appropriate, since some studies show that these strategies produce little effect [7], [8], [10]. Reaffirming the above, Freud tells us that the exclusion of conscious reason and the appearance of new characteristics that the individual manifests as part of a psychological mass are externalizations of the unconscious, an instance in which the dark (and sometimes also the dark) is contained. virtuous) existing in the human soul [8]. Therefore, the direct attack against irrational and emotional decision-making is perhaps not the best way to deal with the problem and any reasoning against it is simply a useless war of words, as the fact suggests of the persistence and growth of anti-vaccine movements despite the fact that many efforts have been devoted to the implementation of strategies, such as repression, travel bans, partial/total isolation, contact tracing and distancing Social. Virus transmission is very likely to pick up while these strategies are being lifted [7], [10]. Consequently, for a long-term approach in the fight against the SARS-CoV-2 coronavirus, the use of vaccines is essential. It is for the above that research on the subject should not only be from the biomedical, behavioral, political, and public health point of view, but also from the psychosocial point of view, this being necessary and a priority [10]. Another cause of psychological crowd behavior is that in a crowd, feelings and all acts become contagious (what Freud calls, *contagion of affects*), the individual sacrificing without difficulty, self-interest for that of the community. mass, which is contrary to its natural tendency [10]. Irreducible beliefs such as those exhibited by the masses, which are impossible to change even with strong evidence against them, have been equated by modern psychiatry with *delusional ideas* [10]. This way of thinking, which is not in accordance with the culture of the subject, in a less intense form is called an *overvalued idea*, but in these, the person can identify at least the possibility that their ideas are not true [11].

Now, S. Freud tells us that his observations of people who are part of a crowd show him that when they are immersed for a time in a crowd that acts based on some group idea, they fall quickly, as an effect of the influences that the crowd produces, in a state very similar to that of the hypnotized in the hands of his hypnotist due to one of the main characteristics presented by the members of these groups, as it is, *suggestibility* [8].

It should be noted that what is described in the previous lines, despite not being a mental pathology itself, comes to dominate the subject's life to a large extent, taking, for example, the decision not to receive the anti-COVID-19 vaccine, for any of the the reasons and conspiracy theories to which it adheres; "infecting" their community and even their primary or extended family nucleus, including children and the elderly who have not acquired or are losing their decision-making power. Returning to Le Bon, he tells us that the individual belonging to a mass will be less willing to control himself considering that this, being anonymous and, therefore, irresponsible, causes the responsibility that controls individuals to disappear entirely. This is how easily and frequently, the points of view and ideas against vaccination that we find in social networks are more persuasive despite how crazy they seem to us, compared to the lesser effect that propaganda in favor of vaccination has. the vaccines [12], [13].

Now a Freudian idea is brought here in which it is expressed as, when a mass desires something, it never desires it for a long time, because it does not have a persistent will, it does not allow a delay between the desire and its satisfaction and the idea of the impossible is not conceivable in the subject that is part of the grouping [8]. It is because of this short duration of the masses that they are appropriate for phenomena with transitory characteristics such as an epidemic or even a pandemic.

Next, an idea of Le Bond is exposed that, in the opinion of the writer, is the most important concept for the way in which we should complement the approach and elaboration of strategies against anti-vaccine movements that are effective.

Some individuals in the crowd who are strong enough in character not to give in to suggestion are rare enough to go against the crowd. However, they might try to divert the group's thinking through different suggestions. In this way, with an expression of happiness and with accurately evoked images, it has been possible to prevent a mass of people from carrying out acts that are harmful to society [7]. Currently, arguments based on reason and science are not enough, so researchers and medicine must focus on generating reliability and calm at an informative and emotional level for those who doubt and are afraid of vaccination, especially against COVID-19.

If you look at the strategies for disseminating ideas of the anti-vaccine movements, you can see their friendly, caricatured style, directed at the emotions of individuals. Access in our time to the internet and the widespread use of social media allows anti-vaccine leaders a greater capacity for propaganda than their founders. False information and anti-vaccine messages are spreading as fast as the coronavirus, in this age of smartphones and tablets as exemplified in Figure 3 [1].



**Figure 3.** Example of propaganda created by anti-vaccine movements where its high emotional content is observed. Whether the feelings expressed by the masses are kind or criminal, they always have a double characteristic, they are simple and exaggerated [7], [13].

Public domain image.

Regarding what is being discussed here, the perception of an affective state can automatically provoke these same emotions in the viewer. The automatic obsession is more intense, the greater the number of individuals in whom the same affect is seen simultaneously. This is how the subject is unable to maintain a critical attitude and is invaded by the emotion emitted by the group. Additionally, when those on whom the influence of the crowd has acted, share their excitement, it increases that of the others, and thus, the emotional charge of the people integrated in the group increases by reciprocal induction [8].

The variability or fluctuation of the masses makes them difficult to govern, especially when an authoritarian and imposed measure has fallen on them [7]. The previous two lines emanating from Le Bon are written to analyze, which makes compulsory vaccination an important phenomenon. In current law, there are various approaches to autonomy and individual freedom. Some countries condition the possibility of studying by

requiring vaccination (USA), in others it is associated with public health (Australia), in some there are fines (Poland) or imprisonment (Pakistan) [13- 16] ¿ Will these types of measures mitigate or enhance the anti-vaccine movements?

From an ethical point of view, mandatory vaccination can become a social norm, but from a legal point of view, it is equivalent to a mandatory medical act that raises the question of whether rights can be limited, with the justification good public health [13- 15]. Another aspect that is currently worrying is that there is a decrease in the confidence of citizens in scientific knowledge and the emergence of this, as a great counterculture. Considering limited sources of information and passing up research that does not agree with their ideas, many hobbyists believe they have the power to refute the facts proven by science, and the worst thing is that there is no sign that this is abating [17- 20].

So far we have seen some concepts, definitions, motivations and ways of thinking of the masses, which make up the anti-vaccine movements; Now this discussion will end by talking about how it would be, perhaps possible and complementary, to address this problem, taking into account the contributions of social psychology and psychoanalysis. Again, seen from Le Bon and because of the high importance given to this idea, the author tells us that the imagination of the masses is strong, active, and vulnerable if it is strongly impressed. The images brought to your mind, for example, by an influential personality like the DOLs (digital opinion leaders) in our time, or by an event, or an accident, are vivid by the masses as real. To a high degree, the masses are like a sleeper, with a rationality temporarily annulled, thus allowing the generation in the mind of very intense images that would disappear if they were subjected to the action of reason. Since the masses are more apt to think with images, a psychoanalytic concept of *figurability*, they are only impressed by them. Only they terrify or attract the masses, becoming drivers for their action. Therefore, for example, histrionic representations, where the image is more clearly visible, have an enormous influence on the masses [7]. Two of the largest organized masses are highlighted here, the army and religion, as well as the infinite use they make of images, figures, insignia and other symbolic instruments to maintain influence over their members [8]. This is how web pages, whether pro-vaccination or anti-vaccination, have a greater impact on the population while they present better images, more notorious and with greater emotional content, these being taken with greater probability as informative or disinformative referents, [19- 23] as exemplified in figures 3 and 4.



**Figure 4.** The great emotional and graphic richness of a social network page of an anti-vaccine movement (left) is evidenced, among others, because of its effectiveness as a means of disinformation. On the right we see pro-vaccine propaganda with poor emotion and sober style. Public domain images.

The World Health Organization defends a pro-preventive vaccination strategy that psychologically prepares populations and optimizes the approval of anti-COVID-19 immunization, of which several points are presented in Table 2 [24].

**Table 2.** Strategies to develop vaccination against COVID-19.

| <b>Guidelines for developing a vaccination strategy against COVID-19</b>                                     |
|--|
| Behavior change planning   |
| Audience targeting and segmentation  |
| Analysis and action of competition and barriers  |
| Mobilization   |
| Creating demand for vaccines   |
| Community involvement  |
| Access to vaccines   |
| Marketing promotions strategy with appropriate content and style to influence the anti-vaccine masses        |
| Relations with the media and dissemination   |
| Digital media strategy with great emotional content and eye-catching graphic design                          |
| Recover confidence in state entities by promoting their transparency and timely dissemination of information |
| Regain confidence in public policies   |

|                                      |
|--------------------------------------|
| Regain confidence in formal medicine |
|--------------------------------------|

|  |
|--|
| Treat with pro-natura alternative medicines in the same way as with anti-vaccination |
|--|

Elaborated and modified by the author after French, [25- 30].

Finally, regarding communication strategies when addressing the issue of anti-COVID-19 vaccination, these important ideas are presented: i. The hesitation to get vaccinated is not irrational per se, as the ideas of the anti-vaccine movements as an organized mass, and their diffusion to the population, are; ii. Pro-vaccination messages must be adapted to achieve greater impact than those used by anti-vaccine movements; iii. What people perceive as trustworthy is situational and can be constantly negotiated; iv. In areas of knowledge where there is still uncertainty, the characteristics and confidence in the speaker become even more important than their scientific knowledge, v. The communicator's credibility is strengthened by finding something in common, such as shared sentiments or widely accepted premises. All these recommendations can be deepened by studying the rhetoric of persuasion [31- 33].

#### 4. Conclusions

This reading wants to leave, by way of suggestion, emphasis on how reliable authorities, influencing people, legislation, and health providers must dispel erroneous information in addition to the traditional approach with areas of knowledge such as social psychology and psychoanalysis and communication sciences; to achieve greater persuasion of the anti-vaccination masses.

#### Grades

**Authorship** The author contributes to the conception and development of this work, as well as to the acquisition, analysis, or interpretation of data. The writing of this manuscript and the critical review of it for its important intellectual content was carried out by the author. The author approved the published version of this article. The author agrees that he or she is responsible for all aspects of the manuscript and warrants that questions regarding the accuracy or completeness of any part of the work are properly investigated and resolved.

#### Conflicts of interest

The author declares no conflicts of interest with the subject of this article.

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Submission language English.

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